

BRFSS Brief

Number 2021-16

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual statewide telephone survey of adults developed by the Centers for Disease Control and Prevention and administered by the New York State Department of Health. The BRFSS is designed to provide information on behaviors, risk factors, and utilization of preventive services related to the leading causes of chronic and infectious diseases, disability, injury, and death among the noninstitutionalized, civilian population aged 18 years and older.

Cardiovascular Disease

New York State Adults, 2019

Introduction and Key Findings

Cardiovascular disease (CVD) is a group of diseases involving the circulatory system and includes stroke and heart disease. Coronary heart disease (CHD), the most common type of CVD, occurs when plaque builds up and narrows the arteries that supply blood to the heart. Heart attack (also called acute myocardial infarction) occurs when an artery becomes completely blocked, resulting in lack of blood flow to the heart. Angina refers to pain or discomfort in the chest that occurs when some part of the heart does not receive enough blood and is a common symptom of CHD. A stroke (cerebrovascular disease) occurs when a clot blocks the blood supply to the brain or when a blood vessel bursts causing internal bleeding in the brain.

CVD is the leading cause of death in New York State (NYS), accounting for 32 percent of all deaths statewide.¹ Heart disease and stroke are major causes of disability.² Lifestyle modifications and interventions could prevent as much as 80% of heart attacks and strokes³; these include never starting to [smoke or quitting](#), being [physically active](#), [eating well](#), including consuming [less sugar-sweetened beverages](#) and reducing [excessive alcohol consumption](#), and being tested and treated for [high blood pressure](#), [elevated cholesterol](#) and [diabetes](#).

Key Findings

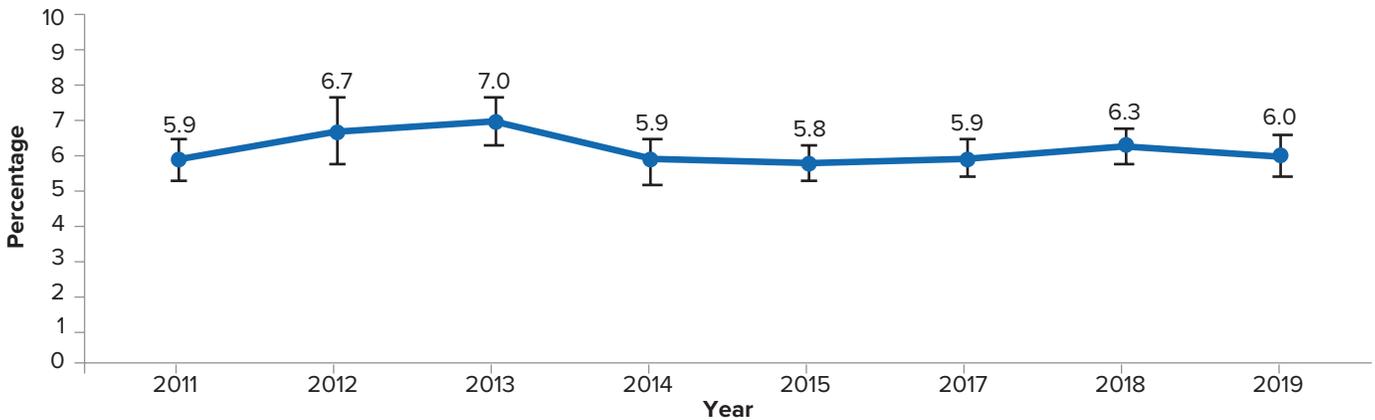
An estimated 1,203,000 adults (7.8%) in NYS report they have had a heart attack, angina/CHD, or stroke. The proportion of adults reporting a heart attack, angina/CHD or stroke increases for each decade of life and is significantly higher for those aged 65 and older compared to those younger than 65. Men, adults with less than a high school education, and adults with Medicare are more likely to report a heart attack, angina/CHD or stroke than women, adults with a high school education or more, and adults with health care coverage types other than Medicare. The prevalence of cardiovascular disease among adults living with disability (18.1%) is over four times greater than the prevalence reported among adults living without disability (4.3%). Stroke prevalence is higher among non-Hispanic black adults (4.6%) than among non-Hispanic white (2.7%), Hispanic (2.2%) or other race or multiracial, non-Hispanic adults (3.4%).

BRFSS questions

Has a doctor, nurse, or other health professional ever told you that you had any of the following?

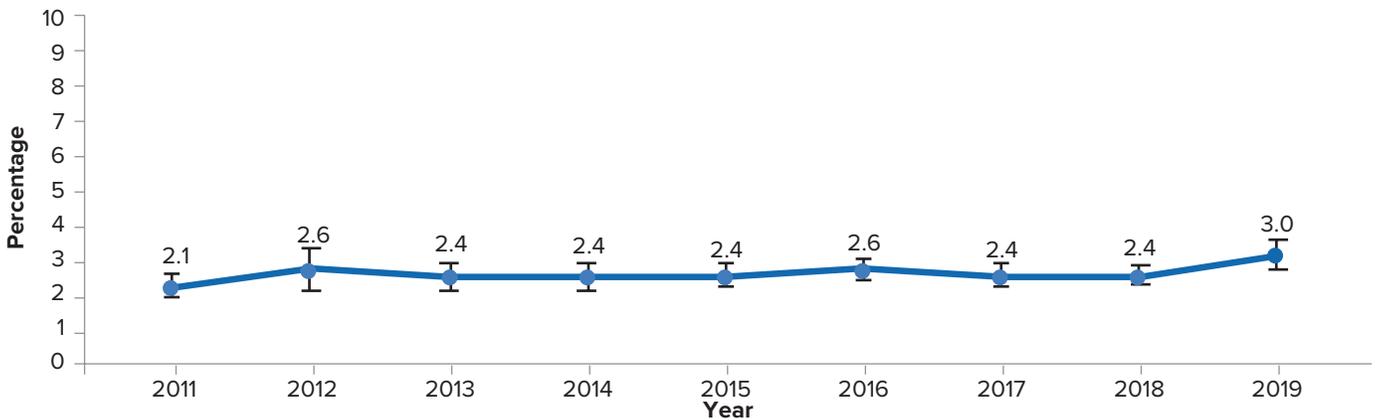
1. [Ever told] you had a heart attack, also called a myocardial infarction?
2. [Ever told] you had angina or coronary heart disease?
3. [Ever told] you had a stroke?

Figure 1. Prevalence of heart attack or angina/CHD among New York State adults, by BRFSS survey year



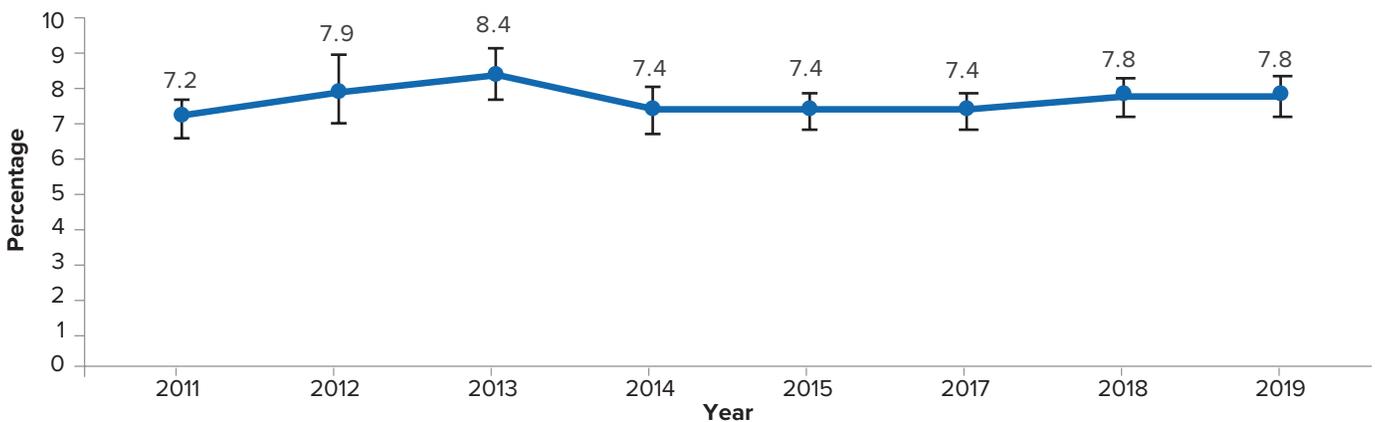
Note: Error bars represent 95% confidence intervals

Figure 2. Prevalence of stroke among New York State adults, by BRFSS survey year



Note: Error bars represent 95% confidence intervals

Figure 3. Prevalence of cardiovascular disease (heart attack, angina/CHD, stroke) among New York State adults, by BRFSS survey year



Note: Error bars represent 95% confidence intervals

History of cardiovascular disease (self-reported heart attack, angina/CHD, or stroke) among New York State adults:^a 2018 BRFSS

| | Heart Attack | | Angina/CHD | | Heart Attack, Angina/CHD | | Stroke | | Heart Attack, Angina/CHD, or Stroke | |
|--|----------------|---------------------|------------|------------|--------------------------|-------------|--------|-----------|-------------------------------------|-------------|
| | % ^b | 95% CI ^b | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| New York State (NYS) [n=14,232] | 3.9 | 3.5 - 4.4 | 3.9 | 3.4 - 4.3 | 6.0 | 5.4 - 6.6 | 3.0 | 2.6 - 3.4 | 7.8 | 7.2 - 8.4 |
| Sex | | | | | | | | | | |
| Male | 4.7 | 4.1 - 5.2 | 4.7 | 4.1 - 5.2 | 7.1 | 6.5 - 7.8 | 2.5 | 2.1 - 2.9 | 8.6 | 7.9 - 9.3 |
| Female | 3.5 | 3.0 - 4.0 | 3.0 | 2.5 - 3.5 | 5.3 | 4.7 - 6.0 | 2.3 | 2.0 - 2.7 | 7.0 | 6.2 - 7.7 |
| Age (years) | | | | | | | | | | |
| 18-24 | * | — | * | — | * | — | * | — | * | — |
| 25-34 | 0.7 | 0.1 - 1.3 | 0.4 | 0 - 0.9 | 1.1 | 0.3 - 1.9 | 0.8 | 0.2 - 1.4 | 1.6 | 0.7 - 2.5 |
| 35-44 | 1.8 | 0.8 - 2.8 | 0.6 | 0.1 - 1.0 | 2.2 | 1.1 - 3.2 | 1.1 | 0.4 - 1.8 | 3.1 | 1.0 - 4.4 |
| 45-54 | 3.3 | 2.1 - 4.5 | 3.0 | 2.0 - 4.0 | 4.8 | 3.5 - 6.1 | 2.7 | 1.8 - 3.6 | 6.7 | 5.2 - 8.1 |
| 55-64 | 5.1 | 3.9 - 6.3 | 4.9 | 3.4 - 6.4 | 8.1 | 6.3 - 9.8 | 4.8 | 3.7 - 6.0 | 11.0 | 9.1 - 12.9 |
| 65+ | 9.8 | 8.6 - 11.1 | 11.2 | 9.6 - 12.8 | 15.6 | 13.9 - 17.2 | 6.6 | 5.3 - 7.8 | 18.9 | 17.2 - 20.7 |
| Race/ethnicity | | | | | | | | | | |
| White, non-Hispanic | 3.5 | 3.0 - 3.9 | 3.7 | 3.3 - 4.2 | 5.6 | 5.1 - 6.2 | 2.7 | 2.3 - 3.1 | 7.4 | 6.8 - 8.1 |
| Black, non-Hispanic | 4.3 | 2.8 - 5.8 | 3.2 | 1.9 - 4.5 | 5.9 | 4.2 - 7.6 | 4.6 | 3.1 - 6.1 | 8.7 | 6.7 - 10.7 |
| Hispanic | 4.1 | 2.8 - 5.3 | 3.2 | 2.2 - 4.2 | 5.5 | 4.2 - 6.9 | 2.2 | 1.4 - 3.0 | 6.5 | 5.0 - 7.9 |
| Other race or multiracial, non-Hispanic ^c | 5.3 | 3.4 - 7.2 | 6.3 | 3.5 - 9.1 | 9.0 | 5.9 - 12.0 | 3.4 | 1.5 - 5.3 | 10.2 | 7.1 - 13.3 |
| Annual household income | | | | | | | | | | |
| <\$15,000 | 7.2 | 5.0 - 9.4 | 7.6 | 4.4 - 10.8 | 11.6 | 8.3 - 15.0 | 6.6 | 4.5 - 8.8 | 15.6 | 12.0 - 19.2 |
| \$15,000-\$24,999 | 7.3 | 5.5 - 9.1 | 5.6 | 3.7 - 7.5 | 10.2 | 7.9 - 12.5 | 4.9 | 3.2 - 6.6 | 12.4 | 10.0 - 14.7 |
| \$25,000-\$34,999 | 6.9 | 4.4 - 9.5 | 3.7 | 2.3 - 5.1 | 8.1 | 2.6 - 10.7 | 2.8 | 1.8 - 3.8 | 9.7 | 7.10 - 12.4 |
| \$35,000-\$49,999 | 4.3 | 2.7 - 5.8 | 4.7 | 3.3 - 6.1 | 6.3 | 4.6 - 8.0 | 2.7 | 1.4 - 3.9 | 8.3 | 6.3 - 10.4 |
| \$50,000-\$74,999 | 2.7 | 1.8 - 3.6 | 2.5 | 1.7 - 3.3 | 3.8 | 2.8 - 4.9 | 2.0 | 1.0 - 2.9 | 5.0 | 3.7 - 6.2 |
| \$75,000 and greater | 1.7 | 1.3 - 2.2 | 2.7 | 2.2 - 3.3 | 3.6 | 2.9 - 4.3 | 1.5 | 1.0 - 2.0 | 4.7 | 3.9 - 5.5 |
| Missing ^d | 3.3 | 2.4 - 4.1 | 3.6 | 2.6 - 4.6 | 5.4 | 4.2 - 6.5 | 3.5 | 2.6 - 4.5 | 7.4 | 6.1 - 8.7 |
| Educational attainment | | | | | | | | | | |
| Less than high school (HS) | 8.5 | 6.4 - 10.7 | 7.2 | 4.8 - 9.5 | 12.0 | 9.3 - 14.7 | 5.2 | 3.5 - 6.8 | 14.2 | 11.3 - 17.0 |
| High school or GED | 4.5 | 3.7 - 5.4 | 3.4 | 2.7 - 4.1 | 6.0 | 5.0 - 6.9 | 3.0 | 2.4 - 3.6 | 7.9 | 6.8 - 8.9 |
| Some college | 3.2 | 2.5 - 3.8 | 3.9 | 3.0 - 4.9 | 5.5 | 4.5 - 6.5 | 3.4 | 2.5 - 4.3 | 7.4 | 6.2 - 8.5 |
| College graduate | 2.2 | 1.7 - 2.7 | 2.9 | 2.3 - 3.4 | 4.1 | 3.4 - 4.7 | 1.6 | 1.2 - 2.0 | 5.3 | 4.6 - 6.1 |
| Disability^e | | | | | | | | | | |
| Yes | 8.7 | 7.4 - 10.0 | 9.3 | 7.7 - 11.0 | 13.9 | 12.1 - 15.6 | 7.7 | 6.4 - 9.0 | 18.1 | 16.2 - 19.9 |
| No | 2.2 | 1.8 - 2.6 | 2.0 | 1.6 - 2.3 | 3.3 | 2.8 - 3.8 | 1.3 | 1.0 - 1.7 | 4.3 | 3.7 - 4.8 |
| Health care coverage type | | | | | | | | | | |
| Private | 2.2 | 1.7 - 2.7 | 2.4 | 2.0 - 2.9 | 3.6 | 3.0 - 4.2 | 1.8 | 1.4 - 2.3 | 4.9 | 4.2 - 5.6 |
| Medicare | 10.5 | 8.9 - 12.0 | 10.6 | 8.7 - 12.4 | 15.6 | 13.6 - 17.5 | 7.9 | 6.3 - 9.6 | 19.8 | 17.7 - 21.9 |
| Medicaid | 4.2 | 2.8 - 5.5 | 3.6 | 2.0 - 5.1 | 6.3 | 4.4 - 8.2 | 3.0 | 2.1 - 3.9 | 7.9 | 5.9 - 9.9 |
| Other insurance ^f | 4.5 | 2.2 - 6.8 | 3.1 | 1.8 - 4.4 | 6.1 | 3.7 - 8.5 | 3.1 | 1.6 - 4.7 | 7.7 | 5.2 - 10.2 |
| Not insured | 2.5 | 1.3 - 3.7 | 2.1 | 0.7 - 3.5 | 3.7 | 2.0 - 5.5 | 1.3 | 0.5 - 2.1 | 4.5 | 2.7 - 6.3 |

^a Rows with less than 50 observations and rows that contain a confidence interval with a half-width of greater than 10 have been suppressed.

^b % = weighted percentage; CI = confidence interval

^c American Indian, Alaskan Native, Asian, Native Hawaiian or other Pacific Islander, Other or Multiracial

^d "Missing" category included because more than 10% of the sample did not report income.

^e All respondents who reported having at least one type of disability (cognitive, mobility, vision, self-care, or independent living)

^f includes VA or Military

References

1. Vital Statistics of New York State, Table 33a: Deaths and Death Rates by Selected Causes and Race, New York State, 2018. Available at: [Table 33a: Deaths and Death Rates* by Selected Causes and Race New York State - 2018 \(ny.gov\)](#) Accessed August 10, 2021.
2. Virani S, et al.; on behalf of the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics—2021 Update: a report from the American Heart Association. *Circulation*. 2021;143:e254-e743.
3. America's Health Rankings analysis of CDC, Behavioral Risk Factor Surveillance System, United Health Foundation, [AmericasHealthRankings.org](#), Accessed August 12, 2021.

Program Contributions

New York State Department of Health
Bureau of Chronic Disease Evaluation and Research
Bureau of Community Chronic Disease Prevention

Order Information

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